Installation Manual

PROXIMITY CARD READERS

C-11, C-21

KaDe

VERSION 1.0

CONTENTS

1. **GENERAL INFORMATION**

Series of proximity card readers C-XX includes the following models:

- C-11
- C-21

These models differ in housing but are identical in terms of electrical pa-rameters. Varied housing and colors matching the chosen model to the place and manner of assembly and to the interior color. The C-21 model is equipped with a keypad. All models are suitable for indoors and outdoors. Models are dedicated for cooperation with Mifare cards (13,56 MHz).

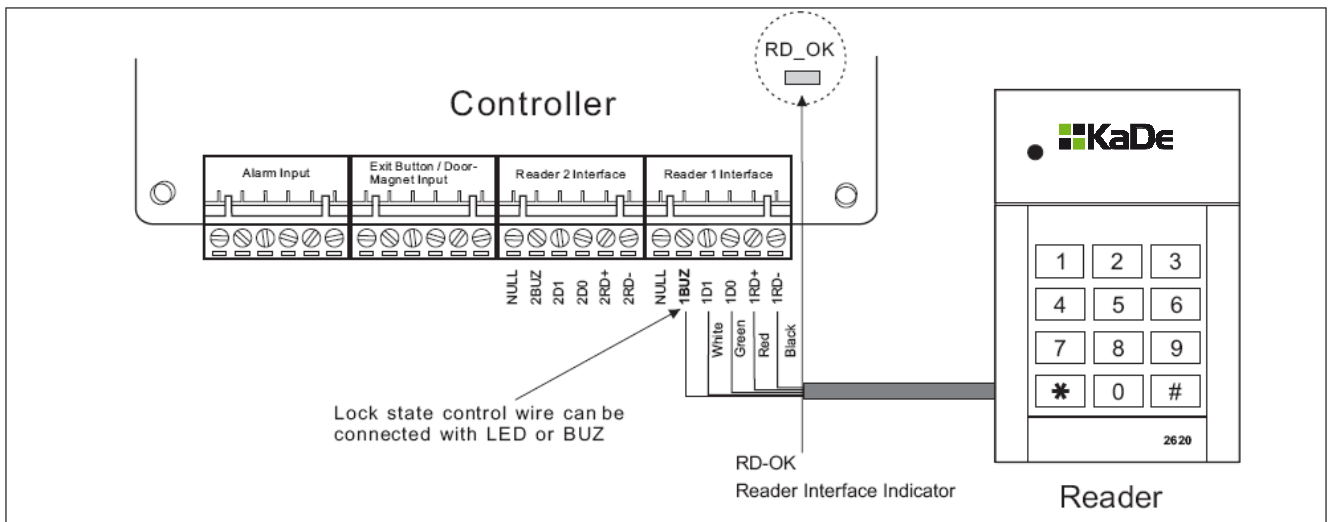Model C-11   Model C-21

C-11, C-21 readers technical data

Parameter or function name	Model C-11	Model C-21
Electrical parameter		
- Supply power	9 - 15 VDC	9 - 15 VDC
- Current load	< 150 mA	< 150 mA
- Anti-static capability	< 15kV	< 15kV
Environment parameter		
- Environment	For indoor and outdoor	For indoor and outdoor
- Working Temperature	Od -15°C do 55°C	Od -15°C do 55°C
- Relative Humidity	0% - 90%	0% - 90%
- Dimensions	100 x 70 x 22 mm	115 x 75 x 22 mm
Communication port		
For connection with controller	Wiegand interface - 34 bits	Wiegand interface - 26/34 bits
Cards		
- Type	MIFARE (MF)	MIFARE (EM)
- Format	Wiegand interface - 34 bits	Wiegand interface - 26/34 bits
- Frequency	13,56 MHz	13,56 MkHz
Keypad	No	Yes
Keypad format	Not concern	4/8-bits, without buffering

Connection table

No.	Color of wire	Function description
1	Red	Power 9 - 15 VDC (+12 nominal)
2	Black	GND - ground
3	Green	DATA 0 - Wiegand output
4	White	DATA 1 - Wiegand output
5	Yellow	Buzzer
6	Blue	LED

Reader installation - example with KS-1012 controller

1. Remove the cover from the reader gently undermining its edge at the bottom of the back of the reader (model C-11, 21).

2. Using the reader module (or the back cover) as a template to designate the holes on the wall. Drill holes and mount plugs.

3. Connect the cable from the reader terminal to the controller according to the above table. In the case of KS-1012/24 controllers, there is one common output to control LED and Buzzer on the reader.

4. Screw the reader module and snap the cover.

The procedure for changing the output format for cards and the keypad - relates to the C-21 model

Because different types of controllers require different encoding formats of information sent by the reader keypad or after card reading, therefore the C-21 model has the ability to change the format of the codes sent to the controller after pressing the selected button or after reading card.

We can choose one of the two most popular formats concern keypad:

- 4-bit (for use with KaDe controllers)
- 8 bit (for use with Kantech and RBH controllers)

We can choose one of the two most popular formats concern card:

- 26-bit
- 34 bit (full 32 bits Mifare card number plus start/stop bits)

Currently set format is signaled after power:
- one beep short/ one flash a green LED - 26/4-bit format
- two beeps short/ two flashes green LED - 26/8-bit format
- one beep long/ one flash a green LED - 34/4-bit format
- two beeps long/ two flashes green LED - 34/8-bit format

Change the current format to another can be performed as follows:
- turn off the power reader
- power reader on again
- within 30 seconds after power, enter code:

Card - 26 bits / 4 bits keypad * 2644488804 # - 1 short beep
Card - 26 bits / 8 bits keypad * 2644488808 # - 2 short beeps
Card - 34 bits / 4 bits keypad * 3444488804 # - 1 long beep
Card - 34 bits / 8 bits keypad * 3444488808 # - 2 long beeps

The reader will confirm the change in the current format to another available by generating one or two sounds and the same number of flashes the green LED.
From then set the format in effect until repeat the above procedure.
Sequential change of the two available formats, you can perform any number of times.

NOTES